

IN THE CLAIMS

Please amend the claims as follows:

1 (Currently amended). A system, comprising:
a mobile station; ~~and~~
~~an access point~~ that includes a first and second sector antenna to
operate simultaneously in a transmit mode, where a combination of the
first and second sector antennas ~~provides~~ form a virtual omni-directional
antenna selected in a Request to Send (RTS) and Clear To Send (CTS)
exchange with an access point.

2 (Original). The system of claim 1, wherein the first sector antenna transmits a first tone and the second sector antenna transmits a second tone differing from the first tone.

3 (Original). The system of claim 1, wherein the first sector antenna transmits a first signal and the second sector antenna transmits the first signal delayed in phase from the first signal.

4 (Original). The system of claim 1, wherein the access point further includes an omni-directional antenna.

5 (Canceled).

6(Currently amended). A communications network, comprising:
~~an access point~~ a mobile device having at least two omni-directional antennas, where a first omni-directional antenna is formed by ~~the~~ a combination of multiple sectored antennas and the at least two omni-directional antennas use different tones.

7(Original). The communications network of claim 6, where the combination of multiple sectored antennas includes a first sectored antenna having a sector to cover a radiation pattern of substantially 0 to 90 degrees and another sector to cover a radiation pattern of substantially 180 to 270 degrees.

8(Original). The communications network of claim 7, where the combination of multiple sectored antennas includes a second sectored antenna having a sector to cover a radiation pattern of substantially 90 to 180 degrees and another sector to cover a radiation pattern of substantially 270 to 360 degrees.

9(Original). The communications network of claim 6, where the combination of multiple sectored antennas includes first and second sectored antennas, the first sectored antenna having a radiation pattern of substantially 0 to 180 degrees and the second sectored antenna having a radiation pattern of substantially 180 to 360 degrees.

10(Original). The communications network of claim 9, wherein the first sectored antenna transmits a first signal and the second sectored antenna transmits the first signal delayed in phase from the first signal.

11(Original). The communications network of claim 6, wherein the combination of multiple sectored antennas includes three sectored

antennas having radiation patterns that combine to form the first omni-directional antenna.

12(Original). The communications network of claim 11, wherein the three sectored antennas include a first sectored antenna having a radiation pattern of substantially 0 to 90 degrees, a second sectored antenna having radiation patterns to cover substantially 90 to 180 degrees and 270 to 360 degrees, and a third sectored antenna having a radiation pattern of substantially 180 to 270 degrees.

13(Original). The communications network of claim 6, wherein the combination of multiple sectored antennas includes four sectored antennas having radiation patterns that combine to form the first omni-directional antenna.

14(Original). The communications network of claim 13, wherein the four sectored antennas each cover a radiation pattern of about 0 degrees to 90 degrees and are appropriately positioned to form the first omni-directional antenna.

15(Canceled).

16(Original). A receiver system of an access point, comprising:
two omni-directional antennas coupled to a receiver of the access point, where at least one of the two omni-directional antennas is a combination of two complimentary placed sectored antennas.

17(Original). The receiver system of claim 16, wherein the two omni-directional antennas allow Cyclic Delay Diversity (CDD) techniques to be employed.

18(Original). The receiver system of claim 16, wherein the at least one of the two omni-directional antennas includes a first sectored antenna to transmit a first signal and a second sectored antenna to transmit the first signal delayed from the first signal.

19(Original). The receiver system of claim 18, wherein the first and second sectored antennas in a multiband system receive interleave symbols across sub-bands.

20(Original). The receiver system of claim 18, wherein the first sectored antenna or the second sectored antenna is selected for receiving the best mobile station signal.

21(Currently amended). The receiver system of claim 16, wherein a first omni-directional antenna is placed in one corner of a display for a laptop computer and a second omni-directional antenna is placed in another corner of the display.

22(Original). The receiver system of claim 16, wherein a first omni-directional antenna is placed along one side of a display for a laptop

computer and a second omni-directional antenna is placed along another side of the display.